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California Carrots: Marketing Channels and Farm-to-Retail Margins, 1948-1949

by

Jerry Foytik

Results of a Study Conducted by the
California Agricultural Experiment Station
in Cooperation with the
United States Department of Agriculture,
Bureau of Agricultural Economics, and the
California Farm Bureau Federation

July 1951

Contribution from the
Giannini Foundation of Agricultural Economics
Mimeographed Report No. 118

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Introduction

This report describes the distribution channels utilized and the marketing margins incurred in moving fresh carrots from producing areas to the housewife. It relates to one phase of a larger study undertaken in 1948 jointly by the California Farm Bureau Federation, the United States Department of Agriculture, Bureau of Agricultural Economics, and the California Agricultural Experiment Station. The over-all investigation was made in an endeavor to provide a basis for suggesting possible improvements in the marketing of fresh fruits and vegetables produced and consumed within California.

A considerable part of the California carrot crop is consumed within the state. As in the case of the other fresh fruits and vegetables, a variety of marketing methods are employed in moving carrots from the producer to the consumer.

The information presented is based upon material collected on visits to selected retail stores made during the period, October, 1948-June, 1949. Visitations were confined to independent and local chain stores located within the portion of California west of the Sierra Nevada Mountains. Thus, retail stores located in Alpine, Mono, and Inyo counties and restaurants, farmers' roadside stands, and national chain stores were excluded from the study.

A sample of 66 stores in the more densely populated and accessible areas of the state was visited fourteen times--once each half month during October-December, 1948, and March-May, 1949, and once in late February, 1949, and in early June, 1949. During early November, early April, and early June visits were also made to 117 stores located in the relatively remote regions. In about 92 per cent of the visits, carrots were sold and satisfactory data could be obtained. Thus, a total of 1,080 usable field interview schedules was secured--757 for northern California and 323 for southern California--representing a volume of 7,000 crates.

The basic procedure for establishing the facts regarding the movement of supplies and distribution costs consisted of following each lot of carrots from the retail store back to the original producer. At each point in the distributive system, prices and sources of supplies were noted. In addition, the retail proprietor or store manager was asked: "How many pounds were thrown away last week due to waste and spoilage?" and "What amount was sold last week?" The answer to the questions supplied information on spoilage loss and the weight to be

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attached to each store in the computation of certain weighted averages. Geographic location, city size, store size, and store type formed the basis for classifying the original schedules into various subgroups for which the data were summarized.1/

Among the significant findings to be discussed are:

1. California carrots sold fresh in local retail stores come chiefly from the coastal area of the state south of San Francisco. During February-June supplies are drawn primarily from Imperial and Riverside counties.

2. Carrots marketed fresh move from producers to wholesalers to retailers. During the latter part of this distributive channel, an appreciable portion of the total volume is handled by truck-jobbers, especially in the case of retailers located in the smaller cities of California. Very little is sold by producers directly to retailers, except for supplies to retailers in coastal northern California during October-December and to a lesser extent for carrots handled throughout the season by retailers in the large cities of Central Valley (Sacramento, Stockton, and Fresno). Packers handle a substantial portion of the carrots received by wholesalers.

3. Striking variations in the sources of retailers' carrot supplies exist due to the geographic location of stores and the season of the year. Retailers in large cities (except for the large cities of coastal northern California during the early part of the season--October-December) secure almost their entire supply from near-by wholesalers. Small city retailers obtain approximately 30 per cent of the carrots they sell from producers, packers, truckers, and truck-jobbers, 20 per cent from small city wholesalers and 50 per cent from wholesalers in neighboring large cities.

4. During October-December 60 per cent of carrots sold in northern California come from producers in Monterey and Santa Cruz counties. The remaining supplies come from the near-by counties of the San Francisco Bay area for retailers in coastal northern California and from other northern California producing areas for sales in Central Valley. Southern California retailers obtain 40 per cent of their carrots at this time from Monterey and Santa Cruz counties, 35 per cent from producers in southern California, and 25 per cent from other areas of northern California. Later in the season the bulk of the carrots sold in all three major subdivisions of the state come from southern California producers, especially those located in Imperial County.

5. Losses due to physical waste and spoilage are small, averaging 1.9 bunches from each crate of 72 bunches--i.e., about 2.7 per cent of the supplies shipped to retailers.

1/ A more detailed description of the procedure used is given in Appendix A. Here, also, are given certain data from which the summaries appearing in the text tables were prepared. The precise meanings to be attached to the various terms used throughout the report appear in Appendix B. In some cases these are somewhat at variance with prevailing usage. For example, some dealers often called "jobbers" are, for convenience of this study, classified as "wholesalers."

6. The cost of retailing is an important element in the total cost of moving carrots to the consumer. About 35 cents of the retail dollar go to cover the retailers' margin.

7. The preretail margin is almost 40 per cent of the retail price. Packaging, transportation and wholesaling accounted for 24, 9, and 7 cents, respectively, of the retail dollar.

8. Thus, about 25 cents of the consumer's dollar remained for growers to cover costs of production, harvest, and field packing.

9. There are significant differences among stores with respect to their spoilage loss, retail margin, and consumer price. These variations can be partly explained by difference in the location, size, and type of stores considered. Possibly the most significant difference is the considerably lower retail price and retail margin prevailing at most cash-carry stores in the larger cities.

Channels of Distribution

A description of the channels through which fresh carrots, as well as other commodities, flow from producers to consumers includes two separate aspects. Various dealers bring together supplies from many producers and then disperse them among numerous retail outlets at which housewives make their purchases. These supplies move from producing areas to consuming markets along a variety of geographic paths.

Dealer Types.--The relative importance of the different dealer types handling California-produced fresh carrots sold through retail stores (exclusive of national chains) within the state is shown in figure 1. Material is shown separately for the northern and southern parts of the state as divided by the Tehachapi Mountains. Grower-shippers (producers who operate permanent packing sheds and grow at least half of the produce packed in these sheds) handle slightly more than half of the carrots sold at retail.

It will be noted that the principal channel for marketing fresh carrots is from the producer through the wholesaler to the retailer. A large portion of this quantity, especially in northern California, passes through packers on its way to the wholesaler. Direct marketing, from producer to retailer, is negligible. Truckers, who usually buy a few commodities in the producing areas and resell them to other dealers (or retailers), are insignificant in the distributive system used for moving carrots to retailers.

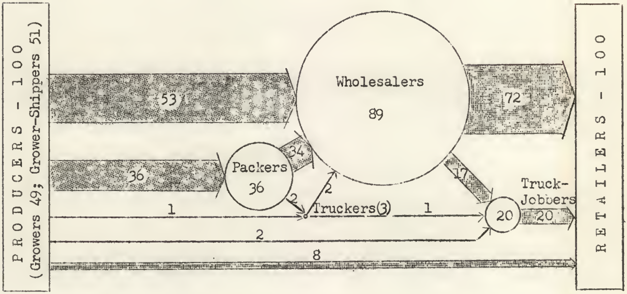
Truck-jobbers handle a substantial quantity of the carrots sold at retail, especially north of the Tehachapi Mountains. About 20 and 13 per cent of retail sales in the northern and southern portions of the state, respectively, are moved through truck-jobbers, who generally buy a wide variety of items from wholesalers and resell to retailers along a regular truck route.

Some striking differences exist as to the retailers' source of carrots. In order to present these differences more clearly, the data of table 1 are shown separately for the early and late parts of the season.

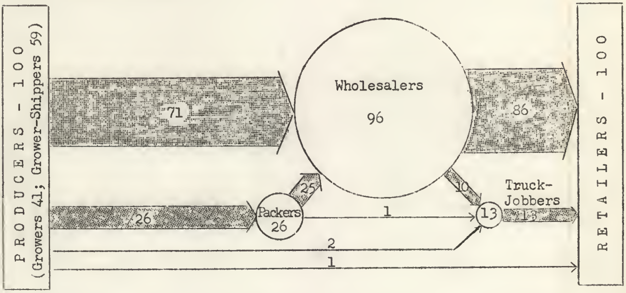
FIGURE 1

Marketing Channels for Fresh Carrots,
Northern California and Southern California, 1948-49

Northern California



Southern California



(Note: All numbers expressed as percent of total volume sold at retail)

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TABLE 1

Retailers' Source of Fresh Carrots, by Dealer Types,a/
California, October 1948-June 1949

Retail store location b/	Producers and packers	Truckers and truck-jobbers	Wholesalers in Large cities	Wholesalers in Small cities
	1	2	3	4
	October-December: per cent of all dealer types			
Southern California				
Large cities	2.4	6.2	91.4	0
Small cities	0	23.4	71.4	5.2
All cities	1.6	12.2	84.4	1.8
Central Valley				
Large cities	13.5	1.5	85.0	0
Small cities	3.0	25.7	29.7	41.6
All cities	4.9	21.3	39.7	34.1
Coastal Northern California				
Large cities	32.2	0.2	67.6	0
Small cities	41.6	12.2	22.7	23.5
All cities	35.8	4.8	50.4	9.0
California				
Large cities	13.2	3.9	82.9	0
Small cities	12.2	21.1	44.6	22.1
All cities	12.8	11.5	66.0	9.7
	February-June: per cent of all dealer types			
Southern California				
Large cities	0	3.5	96.5	0
Small cities	4.1	16.2	66.3	13.4
All cities	1.4	7.9	86.0	4.7
Central Valley				
Large cities	13.8	3.6	82.6	0
Small cities	2.3	31.0	41.6	25.1
All cities	4.4	26.0	49.0	20.6
Coastal Northern California				
Large cities	3.2	0.5	96.3	0
Small cities	5.6	34.8	38.1	21.5
All cities	4.1	13.7	74.0	8.2
California				
Large cities	1.9	2.5	95.6	0
Small cities	3.9	26.1	50.6	19.4
All cities	2.8	12.9	75.7	8.6

a/ Classification of persons from whom retailers purchased their supplies.

b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

During the early months (October-December), when supplies come primarily from northern California producing areas (see table 3), about 35 per cent of the supplies for retailers located in coastal northern California and almost 15 per cent of the carrots sold in the large cities of Central Valley (Sacramento, Stockton, and Fresno) are obtained directly from producers and packers. At this time retailers in small cities of California secure one-fifth of their carrots from truckers and truck-jobbers. Later in the season, when southern California is the important source of carrots, the only group of retailers purchasing a significant portion of their supplies directly from producers and packers are those located in the large cities of Central Valley. Truckers and truck-jobbers continue to furnish an important part of the volume sold by small city retailers, especially those located in northern California. Thus, producers, packers, truckers and truck-jobbers supply about 15, 25, and 40 per cent of the carrots sold by retailers during October-December in southern California, Central Valley, and coastal northern California, respectively, compared to 10, 30, and 20 per cent for February-June. During both periods relative supplies coming from these sources are considerably greater for small city retailers than for those located in larger cities.

Thus, about 90 and 70 per cent of the carrots sold in large cities and small cities, respectively, move from wholesale markets to retail stores. About half of the carrots sold in small cities of northern California and almost the entire amount for southern California small cities coming from wholesale markets are obtained from large city wholesalers. That is, there is a definite tendency for retailers in small cities to supplement carrots obtained directly from producing areas by supplies from wholesalers located in the larger cities. Small city wholesalers account for 9, 33, and 23 per cent, respectively, of retail sales in the small cities of southern California, Central Valley, and coastal northern California. These wholesalers do not appear to sell any carrots retailed in large city retail stores.

Geographic Movement.--The production of California carrots is largely confined to the coastal region of the state extending from the San Francisco Bay area to Los Angeles except for the winter crop, which is grown in Imperial and Riverside counties. Some 8-million crates were produced in 1948 from 27,000 bearing acres. The winter crop, one-third of the annual production, is grown in Imperial County and adjoining areas of Riverside County. Of the acreage devoted to spring and fall crops, almost 60 per cent was located in Monterey County, over 20 per cent in Santa Barbara, Ventura, and Los Angeles counties, 10 per cent in Fresno and Kern counties, and 10 per cent in other portions of the state. These bearing acreage data are summarized, on a county basis, in table 2.

Figure 2 shows the geographic distribution of survey cities and producing areas. This information is relevant to our discussion of the geographic movement of supplies for fresh sales to each of the three major subdivisions of the state. Since, however, over half the crop is shipped to eastern markets, the geographic movement of supplies within California may be substantially different from the pattern suggested by the data of table 2.

As a consequence of this localization in production, the general geographic movement of supplies sold at retail within the state is largely from the coastal region to metropolitan Los Angeles and metropolitan San Francisco. Actually, an important question requiring elaboration is: "How do supplies reach retailers?" That is, there needs to be some indication as to the relative importance of the different dealer types from whom retailers obtain their supplies and of the various producing areas from which carrots are secured.

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TABLE 2

Bearing Acreage of Carrots by Counties,
California, 1948

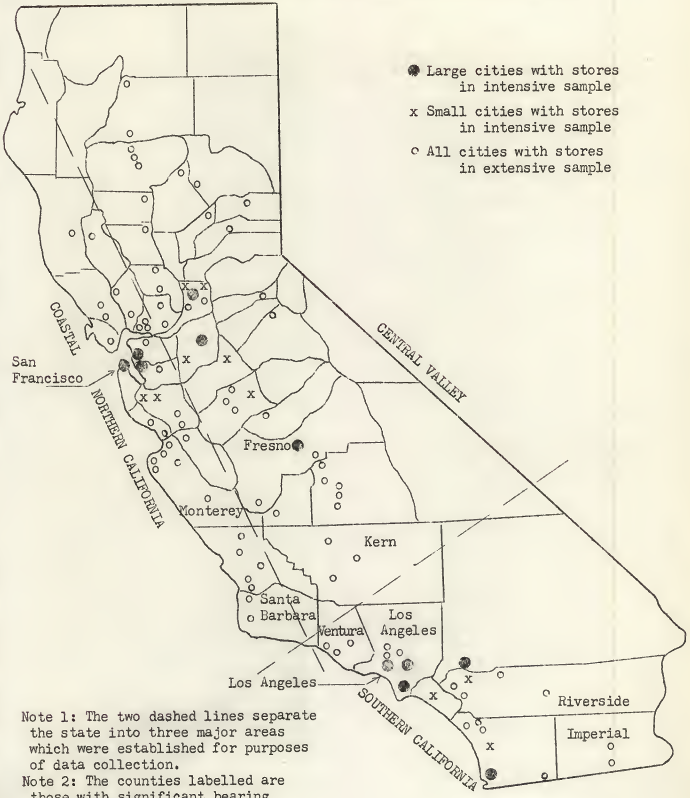
Area	Winter	Spring	Fall	Total
Monterey County		3,600	6,750	10,350
San Francisco Bay area[a/]		250	500	750
Santa Cruz-San Luis Obispo		250	250	500
Santa Barbara		400	1,700	2,100
Fresno-Kern		450	1,050	1,500
Other northern California		200	400	600
Ventura		300	400	700
Los Angeles		500	850	1,350
Riverside	400	0	0	400
Imperial	8,500	0	0	8,500
Other southern California	0	50	100	150
California	8,900	6,000	12,000	26,900

a/ Includes San Francisco, San Mateo, Contra Costa, Alameda, Santa Clara and San Benito counties.

Source: California Crop and Livestock Reporting Service, "Vegetable Crops in California," May 1950.

FIGURE 2

Geographic Distribution of Survey Cities and Producing Areas



Note 1: The two dashed lines separate the state into three major areas which were established for purposes of data collection.

Note 2: The counties labelled are those with significant bearing acreage in 1948 (see table 2).

Since variations in retailers' sources arise from differences in the geographic location of stores, the summary presented in table 3 shows the data for various retail store locations. Information is given separately for the early and late parts of the season. These data reveal a definite tendency for carrots from the southern portion of the state to move to retailers in southern California and for supplies produced further north to be sold in retail stores of northern California.

Farm-to-Retail Margins

The producer, the retailer and each intervening dealer handling carrots receive a portion of the final price paid by the housewife. Certain physical losses due to waste and spoilage are incurred during the process of moving supplies from producing areas to consuming markets. Both of these aspects of the distributive problem are to be considered briefly here.

In this description the term "margin" refers to the difference between the price paid by a handler (delivered to his premises) and the price received by the same handler (f.o.b. his premises). If the handler performs the transportation function, an estimate for the cost is deducted. Thus, "margin" refers to the charges made rather than the sum of expenses incurred for labor, rent, depreciation, etc.

Main Cost Components.--California consumers paid an average price of 8.2 cents per bunch for carrots purchased at retail during the survey period. Approximately one-third of the consumer's dollar was accounted for by the retailer's margin--to reimburse the retailer's expenses and to compensate for spoilage occurring within the distributive channel. Another 40 per cent covered all other distributive charges incurred in packing, transporting, and wholesaling. The final 25 per cent was returned to growers to cover their production and harvesting costs.

The average crate leaving the farm contained 72 bunches of carrots, including 70.1 sold to consumers and 1.9 unmerchantable at retail because of spoilage loss. The quantity not sold due to waste and spoilage includes both the amount thrown away while unpacking and additional carrots subsequently spoiled or damaged in the store. In other words, from a crate bought by the average retailer, about 70 bunches were sold to consumers for $5.76, i.e., at approximately 8.2 cents per bunch. The spoilage loss is shown as a part of the retailer's margin.

About 60 per cent of the preretail distribution margin consists of charges for "packing and container." This item includes the cost of the container, hauling to the packing shed, cost of packing--whether performed by packers or by growers--and net profits for packers. Somewhat over half of the remainder was accounted for by the "wholesaling margin," which includes all charges, fees, commissions, and net profits by dealers between packers and retailer. "Transportation"--approximately 17 per cent of the preretail marketing charges--is considered as a separate item regardless of who performed the function.

TABLE 3

Retailers' Source of Fresh Carrots, by Producing Areas,[a]
California, October 1948-June 1949

Retail store location[b]	Southern California[c]	Contra Costa, Alameda, San Mateo, Santa Clara and San Benito counties	Monterey and Santa Cruz counties	Other northern California
	1	2	3	4
	October-December: per cent of all producing areas			
Southern California				
Large cities	31.9	0	38.6	29.5
Small cities	32.6	0	47.4	20.0
All cities	32.1	0	41.7	26.2
Central Valley				
Large cities	1.2	0	84.0	14.8
Small cities	0.5	0.2	60.3	39.0
All cities	0.6	0.2	64.6	34.6
Coastal Northern California				
Large cities	0	32.5	64.4	3.1
Small cities	0	33.2	44.1	22.7
All cities	0	32.8	56.6	10.6
California				
Large cities	19.2	11.1	50.1	19.6
Small cities	13.3	9.0	50.7	27.0
All cities	16.6	10.2	50.3	22.9

Retail store location[b]	Imperial County	Other southern California	All northern California
	February-June: per cent of all producing areas		
Southern California			
Large cities	92.2	7.8	0
Small cities	92.0	5.7	2.3
All cities	92.1	7.1	0.8
Central Valley			
Large cities	75.4	4.5	20.1
Small cities	90.6	0.2	9.2
All cities	87.8	1.0	11.2
Coastal Northern California			
Large cities	96.8	0	3.2
Small cities	85.2	0.6	14.2
All cities	92.4	0.2	7.4
California			
Large cities	92.8	5.0	2.2
Small cities	89.7	2.5	7.8
All cities	91.4	3.9	4.7

a/ Classification of areas purchasing the carrots ultimately sold at retail.

b/ See figure 2 for geographic distribution of survey cities and Appendix B for definition of city size.

c/ Mostly Los Angeles County during October-December and Imperial County during February-June.

"Farm price" is the residual obtained by subtracting the retail and pre-retail margins from the price charged consumers. It is specified at the farm gate in order to include the amount received by growers for harvested but unpacked carrots. When field packing was performed, however, the packing costs were included within the farm price.

The distribution of consumers' expenditures among these cost categories is shown in table 4. Total costs incurred in moving one crate of carrots through the entire distributive channel from the producer to the housewife are prorated between actual sales (97.3 per cent of the original crate) and the quantities not sold due to spoilage. In the last column appears the percentage distribution of costs. These figures correspond to the "per cent of the consumer's dollar" as this term is used by the U. S. Bureau of Agricultural Economics

This information is portrayed in a somewhat different way by figure 3. Three blocks (proportional to the percentage distribution of the retail price) on the left indicate the major recipients of the consumer's expenditure ($5.76) for a crate of carrots leaving the farm. The physical division of these seventy-two bunches of produce between the housewife and the garbage can is shown on the right. One bunch of carrots must be discarded by the retailer for every thirty-five he sells to his customers.

Retail Margins.--As might be expected, there is considerable variation among stores with respect to their spoilage, retail margin, and consumer price. Appendix table A-3 presents these data for the survey stores classified according to geographic location, store size, and store type. Comparable data for selected larger store groupings are summarized in table 5. Variations in these factors can be partly, but only partly, explained by difference in the location, size, and type of stores considered.

Variations exist in retail prices and margins. The most noticeable difference is the considerably lower price and margin prevailing at most cash-carry stores in the larger cities. The average retail price and retail margin were also lower for large stores compared to near-by small stores. In addition, the price charged by stores located in large cities, generally, was less than at those in small towns and rural areas, although their retail margins were slightly higher--indicating that the purchase price is somewhat higher for stores in small towns.

Losses due to spoilage were uniformly low, generally less than 3 per cent. Spoilage is about one-quarter greater in southern California than in the northern portion of the state. There is also a tendency for such losses to be higher in cash-carry stores, in large stores, and in large cities than in credit-delivery stores, small stores, and smaller towns.

In the large metropolitan centers of San Francisco, Los Angeles, and San Diego, consumer prices and retail margins were considerably lower while spoilage was much higher at cash-carry stores than at stores offering credit or delivery services. Retail prices and margins were lower at fruit-vegetable stores than at grocery stores, especially in San Francisco. Small stores located within these metropolitan areas had higher prices than prevailed in large stores.

Retail prices and spoilage were somewhat lower for large grocery stores than for large fruit-vegetable and small stores located in the three large

FIGURE 3

Distribution of Total Retail Value of Fresh Carrots
California, Oct. 1948—June 1949

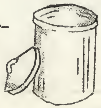
FARM RECEIPTS For each crate the grower receives	$1.48
PRE-RETAIL MARGIN For packaging, transporting, and wholesaling	$2.27
RETAIL MARGIN To cover costs and spoilage	$2.01

Total retail value per crate $5.76

From the average crate

97.3% goes to consumer

2.7% goes to garbage can



1.9 bunches entering retail store are, or become, unusable due to spoilage

70.1 bunches entering the retail store are sold at 8.2 cents per bunch (for a retail value of $5.76)

TABLE 4

Main Cost Components for Fresh Carrots
California, 1948

Item	Costs for 70.1 bunches sold at retail (97.3 per cent of the original crate)	Costs for 1.9 bunches not sold due to spoilage a/ (2.7 per cent of crate)	Total costs (72 bunches leaving the farm and 70.1 bunches sold at retail)	Percentage distribution of costs for 72 bunches leaving the farm
	1	2	3	4
	dollars per crate (of 72 bunches) leaving the farm			per cent
Farm price (at farm gate) b/	1.440	.040	1.48	25.7
Packing and container	1.323	.037	1.36	23.6
Transportation	.506	.014	.52	9.0
Wholesaling margin	.379	.011	.39	6.8
Preretail margin	2.208	.062	2.27	39.4
Retail margin	1.956	.054	2.01	34.9
Total	5.604	.156	5.76	100.0
Retail price (cents per bunch) c/			8.2	

a/ Physical losses through waste and spoilage.

b/ Includes harvesting costs but excludes packing cost unless performed in the field.

c/ Retail price to the consumer: Total cost ($5.76) divided by volume of sales (70.1 bunches).

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TABLE 5

Spoilage Loss, Retail Price, and Retail Margin on Fresh Carrots Sold at Retail, by Selected Store Groupings, California, October 1948-June 1949

Store type and area a/	Store visits b/	Volume reported c/	Average spoilage loss d/	Average retail price	Retail margin	
					Average e/	As per cent of price f/
	1	2	3	4	5	6
	number	crates	per cent	cents per bunch		per cent
All Store Types						
California	1,080	6,960	2.7	8.2	2.9	35
Southern California	323	2,702	3.0	8.1	2.7	34
Northern California	757	4,258	2.4	8.4	3.0	36
By Store Types (All California)						
Credit-delivery stores	522	1,957	2.0	8.5	3.2	37
Cash-carry stores	558	5,003	2.7	7.7	2.7	35
Large stores	689	6,087	2.9	7.8	2.7	34
Small stores	391	873	2.5	8.7	3.1	35
Stores in large cities	544	4,615	2.9	8.0	2.9	36
Stores in small cities	536	2,345	2.4	8.5	2.8	33
Metropolitan Los Angeles and San Francisco g/						
Credit-delivery stores	143	667	2.2	8.9	3.6	41
Cash-carry stores	261	3,281	3.0	7.5	2.6	35
Sacramento, Stockton, and Fresno						
Large fruit and vegetable stores	14	102	2.8	8.0	3.0	37
Large grocery and small stores	126	565	1.4	8.0	2.8	35
Small Cities (All Store Types)						
Southern California	107	540	2.9	8.3	2.7	33
Northern California	429	1,805	2.1	8.6	2.9	34

a/ See Appendix B for definitions of store types and areas.
b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no carrots were sold).
c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).
d/ Proportion of carrots thrown away during the week due to waste or spoilage.
e/ Difference between the retail selling price and the retailer's purchase price.
f/ Computed from unrounded data and may differ from column 5 divided by column 4.
g/ Including San Bernardino, San Diego, and San Jose.

Note: See appendix table A-3 for data on original store groupings.

[illegible]

cities of the Central Valley (Sacramento, Stockton, and Fresno). In these cities retail prices and retail margins were lower at cash-carry stores, but by a smaller difference than existed in the metropolitan centers.

For rural areas and small towns, retail prices and margins are consistently higher at small stores though the difference is not large. Retail prices and margins are lower at cash-carry stores in southern California and higher in northern California. Prices and margins were much less while spoilage losses were higher in small cities of southern California than in small cities of northern California.

Preretail Margins.--The spread between the farm price and the price paid by retailers consists of the wholesaling margin, transportation charges, and packing and container costs. The relative importance of these three segments of the preretail marketing margin has already been indicated. But it may be well to supplement the preceding summary information with additional detail for the three sets of data used in deriving the figures used in table 2.

Wholesaling margins of wholesalers, truck-jobbers and truckers are shown in table 6. The average margin was 33 cents per crate for wholesalers, 35 cents for truck-jobbers, and 21 cents for truckers. Possibly the most striking fact revealed by these figures is the considerable variation in the wholesaler's margin. The difference between the wholesaler's selling and purchase price is lowest in the metropolitan centers of San Francisco and Los Angeles, somewhat higher in other large cities, and almost 50 per cent higher in small cities.

Table 7 summarizes the packing and container costs for carrots, whether incurred by growers and grower-shippers or by separate packers. It will be noted that these costs are considerably less for grower than for grower-shippers and packers. These data exclude harvesting and field packing costs. Management income (net profit) is included for packers but excluded for growers and grower-shippers.

Costs incurred for transportation services averaged 51.9 cents per crate for the state as a whole. Such charges were slightly lower in southern California than north of the Tehachapi Mountains--49.5 compared to 54.5 cents.

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TABLE 6

Wholesaling Margin[a] for Fresh Carrots by Dealer Types and Areas, California, October 1948-June 1949

Dealer type and area	Margin (per crate of 72 bunches)
	cents
Wholesaler	
Metropolitan Los Angeles	32.3
San Bernardino and San Diego	39.5
Metropolitan San Francisco and San Jose	31.4
Sacramento, Stockton and Fresno	33.3
Small cities	45.0
All California	33.4
Truck-Jobber	
Southern California	31.2
Northern California	37.5
All California	34.9
Trucker	
All California	21.4

a/ Includes all charges, commissions, and brokerage fees, except transportation charges. When transportation was performed by the dealer himself, an estimate of the cost is deducted.

TABLE 7

Packing and Container Costs[a] for Fresh Carrots California, October 1948-June 1949

Producing area	Growers	Grower-shippers	Packers
	cents per crate (of 72 bunches)		
San Francisco Bay	47		
Santa Cruz-Monterey		135	175
San Luis Obispo-Santa Barbara	156	143	154
Sacramento Valley	54		
North San Joaquin Valley	27	56	
South San Joaquin Valley			167
Imperial Valley	150	142	119
All California	106	138	126

a/ Excludes harvesting costs and costs for field packing. Management income (net profit) is included for packers but excluded for growers and grower-shippers.

Acknowledgments

An investigation of this type, based as it is on detailed analysis of hundreds of field interviews, requires the cooperation of many persons and groups. The author's indebtedness to those who helped in one way or another in this study is much greater than the brief summary nature of the report is likely to convey.

Alex Johnson of the California Farm Bureau Federation, Wendell Calhoun and D. B. DeLoach of the United States Bureau of Agricultural Economics, and Harry R. Wellman and Sidney S. Hoos of the California Agricultural Experiment Station helped immensely by their interest in the scope of the over-all investigation, general assistance in formulating plans, and helpful criticism throughout the study.

During its earlier phase, in 1948-1950, the analytical phases of the project were under the supervision of Walter D. Fisher. He assumed responsibility for editing the interview schedules, preparing the statistical tabulations and summaries, and developing suitable analytical methods. A great deal of the exploratory work for this report was completed by Dr. Fisher.

H. Fisk Phelps, Willard F. Williams, Robert V. Enochian, and George A. Jackson, Jr., all jointly employed by the Bureau of Agricultural Economics and the California Experiment Station, and Eldon Dye, Ralph Rush, and Irwin Rust of the California Farm Bureau were responsible for establishing and maintaining contacts with the trade and for collecting and editing the numerous statistical data. Mr. Williams was responsible for directing the field work of this investigation.

The compilation of many of the original data and the voluminous subsequent calculations and tabulations were performed largely by Dorothy Eaton, Mary Gouyon, and Bernice Pfanner of the California Agricultural Experiment Station.

Finally, this study would have been impossible without the active cooperation of retail store managers, produce dealers, packers, and producers throughout California who generously furnished the detailed information requested on prices and sources of supply.

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Appendix A

PROCEDURES USED

The Store Sample.--To obtain reliable information on channels of distribution and marketing costs, the sample of retail stores to be chosen was subjected to various controls--distribution of California population, income distribution within cities, store size, and type of store. In selecting the individual stores to be included, particular attention was given to two considerations. It was desired to represent the entire geographic area of the state, exclusive of Alpine, Mono, and Inyo counties. This meant that stores located reasonably near main highways were chosen as a means of effectively utilizing the available time of the fieldmen doing the actual interviewing. In passing, it should be noted that cities near major highways besides being conveniently located tend to be larger and, therefore, that more stores from such towns normally would be included in the sample. Secondly, the sample had to be limited to stores from which the required data would be given voluntarily and quickly because such information had to be secured directly from the store proprietor or manager. Actually, very few of the stores contacted refused cooperation.

Furthermore, since distributive channels were to be determined and described, certain sampling rates were deliberately introduced. For example, remote geographic areas including mostly small stores, were included even though certain time periods were overrepresented by this procedure. Yet, in this way, additional information was secured on channels of distribution that probably are not functions of time. Limitation of time and personnel precluded collection of data in remote and sparsely settled areas of the state as frequently as in the more accessible areas. It was also felt that more effort should be spent in obtaining information on sources of supply and channels of distribution for retail stores in sparsely settled areas because there is likely to be a wider ranger of types of channels used in these regions.

Accordingly, two sets of retail stores were used. One, called the intensive sample, covered a smaller area and was visited twice a month. The other, designated the extensive sample, covered a wider area and was visited once every six weeks. Figure 2 shows the geographic distribution of the 101 survey cities segregated into three groups (southern California, coastal northern California, and Central Valley region) for which separate interview routes were established. The cities and the number of retail stores included in the intensive and extensive samples of each of these three areas are listed separately in table A-1. These localities are arranged in the approximate order in which the successive stores were visited by the field representative in making his periodic visits.

A total of 66 retail stores in 22 cities were included in the intensive sample. Of these, 20 were located in metropolitan San Francisco, 11 in metropolitan Los Angeles, 19 in other large cities (with populations in excess of 50,000 inhabitants), and 16 in small cities. The extensive sample of 79 cities contained 117 retail stores. Only 5 of these stores were in large cities (Burbank and Glendale).

Stores located in Alpine, Mono, and Inyo counties and all farmers' roadside stands and restaurants were excluded. In addition, it was decided to not gather information from stores belonging to national chain store systems. Members of local chain store organizations, however, were included in the study.

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TABLE A-1

Number and Location of the Sample Retail Stores

Area and city	Number stores	Area and city	Number stores	Area and city	Number stores
		Intensive sample (visited twice each month)			
Southern California		Central Valley		San Francisco Bay Area	
Los Angeles	7	Sacramento	5	San Francisco	10
Pasadena	2	Roseville	2	Oakland	5
Long Beach	2	Placerville	2	Berkeley	5
Santa Ana	1	Stockton	3	Palo Alto	2
San Bernardino	2	Tracy	1	San Jose	2
Riverside	2	Oakdale	1	Total	24
Escondido	1	Modesto	2		
San Diego	3	Merced	2		
Total	20	Fresno	4	Grand total	66
		Total	22	(for 22 cities)	
		Extensive sample (visited once in September)			
Southern California		San Joaquin Valley		Central Coast	
Ventura	2	Rio Vista	1	San Martin	1
Oxnard	1	Walnut Grove	1	Gilroy	1
Santa Paula	1	Galt	1	Hollister	2
San Fernando	2	San Andreas	1	Santa Cruz	3
Burbank	2	Sonora	1	Watsonville	3
Glendale	3	Turlock	1	Salinas	2
Banning	1	Gustine	1	Seaside	1
Corona	1	Los Banos	1	Monterey	1
Elsinore	1	Madera	2	Carmel	1
Fallbrook	1	Coalinga	1	Gonzales	1
Oceanside	1	Reedley	2	King City	1
Ramona	1	Dinuba	2	Paso Rables	2
Jacumba	1	Visalia	3	Atascadero	2
El Centro	2	Exeter	1	Santa Margarita	1
Brawley	2	Lindsay	1	San Luis Obispo	2
Indio	2	Porterville	2	Arroyo Grande	1
Total	24	Avenal	1	Santa Maria	2
		Wasco	1	Lompoc	2
		Taft	2	Total	29
		Bakersfield	3		
		Total	29		
		Sacramento Valley		North Coast	
		Fairfield	1	San Rafael	2
		Winters	1	Petaluma	1
		Woodland	2	Santa Rosa	2
		Auburn	1	Ukiah	2
		Grass Valley	1	Lakeport	1
		Marysville	2	Calistoga	1
		Williams	1	Napa	2
		Willows	1	Vallejo	2
		Oroville	1	Concord	1
		Chico	2	Livermore	1
		Orland	1	Total	15
		Corning	1		
		Red Bluff	2		
		Redding	2		
		Dunsmuir	1	Grand total	117
		Total	20	(for 79 cities)	

On the basis of supplemental information collected, each store was classified according to its geographic location, volume of sales, and type in order to permit a determination of whether significant differences in prices, margins, and spoilage exist for different subgroups. Store size was determined according to sales of all fresh fruits and vegetables during 1948. Stores with sales of fresh fruits and vegetables in excess of $25,000 were classed as large stores; small stores included those with a lesser volume of sales. In addition, information was gathered on store type (in accordance with the definitions listed in Appendix B). Each establishment was classed as an (1) independent or a (local) chain store, (2) a fruit and vegetable or a grocery store, and (3) a credit-delivery or a cash-carry store.

Data Collection.--Four fieldmen devoted full time to gathering the data needed for this study. On each visit to a retail store, the field representative secured (for each fresh commodity included in the study)1/information on: (1) the volume of last week's sales, (2) last week's loss due to waste and spoilage, (3) the purchase and selling price of the produce being displayed, and (4) the source of the store's supplies. The data supplied on last week's sales and loss were used to determine the spoilage factor and the relative weights to be attached to each store in the computation of weighted averages. Information on prices and sources of supply was utilized for determining gross margins of retailers and dealers and for indicating channels of distribution.

Retailers specified dealers from whom current supplies of fresh fruits and vegetables were secured. These dealers were interviewed to obtain information on their own prices and sources of supply. Suppliers of the first dealers were then contacted to ascertain their prices and sources. This same procedure was repeated until the grower source was reached or until sources were traced back as far as possible. In the majority of cases, the original source in the producing area could be ascertained.

By following the movement of each lot of supplies from the retail store back to the original producer, it was possible to double check the prices reported at the various points of the distributive system and to consider prices for individual lots. Where identity of the individual lot could not be retained, prices were obtained for the commodity of a similar quality handled on the same day as that on which the lot in question was handled. Not much subsitution of this type was necessary except where dealers made mistakes in recalling their sources of supply. Thus, margins (the differences between selling and purchase prices) could be determined directly for individual transactions without using average market prices.

Weighting System.--The individual schedules provided the mass of information from which inferences were to be drawn regarding marketing channels and margins prevailing for California-produced fresh fruits and vegetables sold within the state. It was desired to show this information by geographic location, city size, store size, and store type. For this purpose, the data from individual schedules were combined into average prices, average margins, average spoilage losses, etc.,

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1/ The commodities included were fresh asparagus, cantaloupes, carrots, celery, grapes, lettuce, oranges, peaches, pears, potatoes, and tomatoes.

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in two ways. The initial step consisted of summarizing the data for all visits within each subgroup (e.g., large grocery stores in metropolitan San Francisco) using "last week's" sales as weights. In merging the original groups into larger groups (e.g., all retail stores in northern California), the weights used were estimated retail sales of all fresh fruits and vegetables during 1948--given in table A-2.

The latter weights were secured on the basis of the distribution of California population in 1948 (as estimated by the U. S. Bureau of the Census) and on the distribution of sales of fresh fruits and vegetables among different store sizes and store types as obtained from the 1939 census of retail trade. This determination was made in the following way:

1. Sales of fresh fruits and vegetables for the various geographic areas and certain store types (see Appendix B) in 1939 were converted to a per-capita basis.

2. The estimated 1948 population for California was distributed among these areas according to the 1947 population distribution.

3. Dollar sales in 1948 were determined using the above information and assuming that retail prices in California increased during the decade (1939-1948) in the same ratio as United States prices, that per-capita physical consumption remained unchanged, and that 1939 percentage distributions by store size and store type were applicable to 1948.

The percentage weights determined in this manner are shown in table A-2. It is estimated that in 1948 total California retail sales of fresh fruits and vegetables (exclusive of the area east of the Sierra Nevada Mountains) are distributed almost equally between northern and southern California (48.7 vs. 51.3 per cent). In southern California, 65 per cent of total sales occur in large cities and 35 per cent in small cities compared to 46 and 54 per cent, respectively, in the northern portion of the state. A slightly larger volume of fresh fruits and vegetables is sold in small stores than in large stores located in the small cities of the state. In the large cities, especially in southern California, however, a considerably smaller total volume of sales occurred in small cities.

Distribution Channels.--Three factors were expected to affect the source from which a retailer will secure his supplies. Accordingly, the sample stores were classified into 25 groups based on size of stores as measured by 1948 sales of fresh fruits and vegetables, the size of the city in which the store operates, and the geographic area where it is located.

For each category an estimate was made of the proportion of retailer's supplies coming from different sources (dealer or geographic). This estimate was obtained by recording the source of supply for the lot found in the retail store sampled on the day of the interview and weighting this source by last week's sales. It is believed that no significant error is introduced by this procedure, which assumes that there is no significant variation in the sources used by a retailer over the period of one week, even though a considerable change may occur over longer periods of time. Channel percentages leading to each dealer type(e.g., wholesaler or truck-jobber) i.e., for stages preceding the retail level, were obtained in a similar manner. This procedure was followed backwards in the marketing process until the original producer sources were encountered.

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TABLE A-2

Estimated Distribution[a] of Fresh Fruits and Vegetables Sold at Retail, California, 1948

City size and area[b]	Large stores[b] Grocery	Large stores[b] Fruit and vegetable	Large stores[b] All	Small stores[b]	All stores
	1	2	3	4	5
	per cent of sales in southern California[c]				
Large Cities					
Metropolitan Los Angeles			34.1	21.7	55.8
San Bernardino and San Diego			5.8	3.7	9.5
Total	17.2	22.7	39.9	25.4	65.3
Small Cities					
Imperial and Coachella valleys			.5	.5	1.0
Balance of southern California			15.8	17.9	33.7
Total			16.3	18.4	34.7
All Cities			56.2	43.8	100.0
	per cent of sales in northern California[c]				
Large Cities					
Metropolitan San Francisco and San Jose	8.6	13.6	22.2	17.1	39.3
Sacramento	2.3	.6	2.9	3.6	2.8
Stockton and Fresno					3.7
Total	10.9	14.2	25.1	20.7	45.8
Small Cities					
North Coast			3.1	3.6	6.7
San Francisco Bay area (less 2 counties)[d]			4.2	4.6	8.8
Santa Clara, San Benito, Santa Cruz, and Monterey counties			3.3	3.8	7.1
San Luis Obispo and Santa Barbara counties			.9	1.0	1.9
North Sacramento Valley			2.8	3.2	6.0
South Sacramento Valley			2.7	3.1	5.8
North San Joaquin Valley			3.1	3.5	6.6
South San Joaquin Valley			5.3	6.0	11.3
Total			25.4	28.8	54.2
All Cities			50.5	49.5	100.0

a/ Based on distribution of California population in 1948 (as reported by the U.S. Bureau of the Census) and on distribution of California retail sales of fresh fruits and vegetables among different types and sizes of stores (as reported by the 1939 retail census of distribution).

b/ See Appendix B for definitions of areas and of store types.

c/ It is estimated that 51.3 per cent of total sales were in southern California and 48.7 per cent in northern California.

d/ Excluding Santa Clara and San Benito counties.

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These data provide information for showing the relative volume of the commodity ultimately sold at retail which was handled by different dealer types. Average percentages for southern California and northern California were computed using the weights specified in table A-2. The resulting composite figures were used in preparing the charts on marketing channels shown in figure 1 of the text. Table 3 indicates the relative importance of the various producing areas in supplying retail stores in large and small cities of the three major California regions.

Marketing Costs.--In classifying the sample stores into subgroups for purposes of deriving marketing costs, a different grouping from that adopted for determining distribution channels was used. Larger geographic areas were established. The number of subgroups was increased, however, by making a further breakdown of large stores into grocery stores and fruit and vegetable stores and by classifying each store as an independent or a chain store and according to whether or not it offered some credit or delivery service.

Average retail prices, average retail margins, and average spoilage losses for the various subgroups were determined by combining the data obtained from the several individual store interview schedules for each category using "last week's" sales as weights. Table A-3 presents these results for all the groups together with the number of store visits and the volume reported. Data are also given for all store types in California, southern California, and northern California. These data are summarized for broader store groupings in table 5 of the text. Where larger categories of stores were established by merging the data for the original groups, the percentage weights listed in table A-2 were used.

The gross margin for each dealer was taken to be the difference between his selling price (f.o.b. his premises) and his purchase price (delivered to his premises). Where the dealer performed the transportation himself, a deduction for the estimated amount of the transportation cost was made. In addition, any brokerage fees paid were considered to be part of the wholesaler's margin. This procedure was followed in order to secure comparability as between wholesalers who employed independent brokers and those who employed their own salesmen.

Estimates of packing and container charges were obtained through personal interviews with growers, grower-shippers, and packers whose names were given in the tracing-back process previously described. "Farm production" is considered to include all costs up to the point where the commodity is brought to the farm gate or packing house door in a prepacked condition. Marketing costs are those expenses incurred after this point. Harvesting costs, therefore, are considered to be one item of production costs. Where picking was performed by the party doing the packing, an estimate for picking costs was made.

From these data it is possible to estimate the main cost components incurred in moving fresh produce from the grower to the consumer. This information is shown in text table 4 and figure 3. Tables 6 and 7 of the text summarize data on the wholesaling margin and on packing and container costs.

TABLE A-3

Spoilage Loss, Retail Price and Retail Margin on Fresh Carrots Sold at Retail, by Store Type and Area, California, October 1948-June 1949

Store type and area[a]	Store visits[b]	Volume reported[c]	Average spoilage loss[d]	Average retail price	Retail margin	
					Average[e]	As per cent of price[f]
	1	2	3	4	5	6
	number	crates	per cent	cents per bunch		per cent
All Store Types						
California	1,080	6,960	2.7	8.2	2.9	35
Southern California	323	2,702	3.0	8.1	2.7	34
Northern California	757	4,258	2.4	8.4	3.0	36
Metropolitan Los Angeles, San Bernardino, and San Diego						
Credit or delivery	81	271	2.0	8.8	3.5	40
Cash and carry	135	1,891	3.1	7.4	2.4	32
Large--grocery	114	1,422	2.5	7.5	2.5	34
Large--fruit and vegetable	45	641	3.8	7.3	2.4	33
Small--all types	57	99	2.7	8.7	3.2	36
Metropolitan San Francisco and San Jose						
Credit or delivery	62	396	2.6	9.0	3.8	42
Cash and carry	126	1,390	2.8	7.6	3.0	40
Large--grocery	43	533	3.9	8.4	3.4	40
Large--fruit and vegetable	104	1,147	2.1	7.7	3.1	40
Small--all types	41	106	3.3	8.6	3.2	38
Sacramento, Stockton, and Fresno						
Credit or delivery	49	180	0.8	7.9	2.8	36
Cash and carry	91	487	1.6	7.4	2.4	32
Large--grocery	48	387	0.8	7.0	2.1	30
Large--fruit and vegetable	14	102	2.8	8.0	3.0	37
Small--all types	78	178	1.7	8.6	3.2	38
Small Cities--Southern California						
Credit or delivery	44	130	2.2	8.2	2.7	33
Cash and carry	63	410	3.1	7.6	2.5	33
Large	73	484	2.9	7.6	2.5	33
Small	34	56	2.9	9.0	2.9	33

(Continued on next page.)

Table A-3 continued.

Store type and area[a]	Store visits[b]	Volume reported[c]	Average spoilage loss[d]	Average retail price	Retail margin	
					Average[e]	As per cent of price[f]
	1	2	3	4	5	6
	number	crates	per cent	cents per bunch		per cent
<u>Small Cities--North and Central Coast</u>						
Credit or delivery	87	393	1.7	8.5	3.2	38
Cash and carry	54	256	2.3	8.7	2.8	32
Large--North Coast	28	122	3.6	8.3	2.1	26
Large--Central Coast	58	341	1.5	8.6	3.3	38
Small--North Coast	15	66	2.4	8.6	2.8	32
Small--Central Coast	40	120	1.4	8.8	3.5	39
<u>Small Cities--Sacramento and San Joaquin Valleys</u>						
Credit or delivery	199	587	2.0	8.3	2.8	34
Cash and carry	89	569	2.2	8.7	3.1	36
Large--Sacramento Valley	66	342	1.9	8.3	2.6	32
Large--San Joaquin Valley	96	566	2.4	8.6	3.1	37
Small--Sacramento Valley	49	88	1.2	9.1	3.1	34
Small--San Joaquin Valley	77	160	1.8	8.3	3.0	36
<u>Independent Credit-Delivery Stores</u>						
Southern California	124	396	2.1	8.6	3.2	38
North and Central Coast	146	764	2.0	8.8	3.5	40
Sacramento and San Joaquin valleys	226	698	1.7	8.2	2.8	35
<u>Independent Cash-Carry Stores</u>						
Southern California	166	1,662	3.3	7.4	2.5	33
North and Central Coast	162	1,316	1.9	7.6	2.8	37
Sacramento and San Joaquin valleys	170	936	2.0	7.9	2.7	34
<u>Local Chain Stores</u>						
Southern California	33	644	2.5	7.3	2.2	31
North and Central Coast	21	355	4.7	8.5	3.6	42
Sacramento and San Joaquin valleys	32	189	1.7	8.9	3.3	37

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Table A-3 continued.

a/ See Appendix B for definitions of store types and areas.

b/ Number of usable field schedules collected on separate visits to retail stores (excluding reports with inadequate data and visits which indicated that no carrots were sold).

c/ Quantity sold during the "last week" (i.e., the week prior to the date of fieldman's visit).

d/ Proportion of carrots thrown away during the week due to waste or spoilage.

e/ The difference between the retail selling price and the retailer's purchase price.

f/ Computed from unrounded figures and may differ from column 5 divided by column 4.

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Appendix B

DEFINITION OF TERMS

Two metropolitan areas are set up to include the cities of Los Angeles and San Francisco with their surrounding environments. The portion of California east of the Sierra Nevada Mountains (Alpine, Mono, and Inyo counties) was excluded from the study. The remainder of the state is divided into two major regions--southern California and northern California--by the Tehachapi Mountains. Northern California is further subdivided into seven areas.

An arbitrary distinction is drawn between grower-shippers and growers. A "dealer" is defined so as to exclude retailers, producers, brokers, and common carriers. Four dealer categories are established--packers, wholesalers, truckers, and truck-jobbers.

Retail stores are classified according to volume of fresh fruits and vegetables sold, line of commodities handled, kind of business organization, and whether credit and delivery services are offered.

The precise definitions adopted for this study are listed below under three classifications.

Geographic Areas

<u>Metropolitan Los Angeles</u>: The cities of Los Angeles, Pasadena, Burbank, Glendale, Santa Monica, and Long Beach.

<u>Metropolitan San Francisco</u>: The cities of San Francisco, Oakland, Berkeley, Richmond, and Alameda.

<u>Large Cities</u>: Cities with 50,000 or more inhabitants in 1948.

<u>Small Cities</u>: Cities with less than 50,000 inhabitants in 1948.

<u>Southern California</u>: The portion of California lying south of the Tehachapi Mountains and east of Santa Barbara County, but including the city of Santa Barbara and immediate environments--that is, including the seven counties of Ventura, Los Angeles, San Bernardino, Riverside, Orange, San Diego, and Imperial, and the city of Santa Barbara and its immediate environments.

<u>Northern California</u>: The portion of California lying north of the Tehachapi Mountains and west of Ventura County, but excluding the counties of Alpine, Mono, and Inyo and the city of Santa Barbara and immediate environments--that is, all of the state lying outside the area defined as southern California, except the counties of Alpine, Mono, and Inyo which are excluded from the study. Northern California includes two subregions: coastal northern California (Central Coast, North Coast and San Francisco Bay area) and the Central Valley (Sacramento Valley and San Joaquin Valley).

<u>Central Coast</u>: The four counties of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara, but excluding the city of Santa Barbara and immediate environments.

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North Coast: The eight counties of Marin, Sonoma, Napa, Lake, Mendocino, Trinity, Humboldt, and Del Norte.

San Francisco Bay Area: The six counties of San Francisco, San Mateo, San Benito, Santa Clara, Alameda, and Contra Costa, and the city of Vallejo.

South Sacramento Valley: The five counties of Solano (excluding the city of Vallejo), Yolo, Sacramento, El Dorado, and Placer.

North Sacramento Valley: The thirteen counties north of south Sacramento Valley and east of North Coast.

South San Joaquin Valley: The five counties of Kern, Kings, Tulare, Fresno, and Madera.

North San Joaquin Valley: The seven counties of Merced, Stanislaus, San Joaquin, Mariposa, Tuolumne, Calaveras, and Amador.

Dealer Types

Grower: A producer who is actually engaged in growing operations on land (either owned or rented) where the commodity is produced and who does not operate a permanent packing shed. He may pack produce by means of temporary facilities.

Grower-Association: A cooperation association established for the purpose of marketing or processing fresh fruits and vegetables produced by grower members. (A group of growers working together in harvesting and marketing a crop and jointly sharing in the receipts is considered a grower-association, even though a formal association has not been legally established. As a guide, the field work was conducted subject to the rule that the informal group must include at least ten producer members before it was classed as a grower-association.)

Grower-Shipper: A producer who also operates a permanent packing shed and who grows more than 50 per cent of the produce packed in this shed. (Usually a grower-shipper is a large producer.)

Retailer: A person whose principal business is to sell to individual consumers, but excluding any producer who sells directly to consumers, except where such producer has an established retail outlet which is his major business.

Broker: An agent who does not have title to or physical control of the produce, but who negotiates sales and receives a brokerage or commission fee.

Dealer: A person whose principal business is to buy produce on his own account or to receive produce on consignment and to sell it to others, except individual consumers. (This is a general term intended to include packers, wholesalers, truckers, and truck jobbers and to exclude retailers and producers, and also brokers and common carriers who do not take title to produce).

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Packer: A dealer who assembles, packs, processes, loads, and/or ships produce, the major portion of such produce being bought from growers or handled for their account. (Usually, he operates a permanent packing shed. If a party grows more than 50 per cent of the produce packed, he is classified as a Grower, Grower-Association, or Grower-Shipper and not as a Packer.)

Wholesaler: A dealer whose principal business is to receive produce, store it, and resell it to others at an established place of business. (He may buy either from growers or other dealers and may sell either to retailers or other dealers. He may perform delivery service but must have an established place of business. If a dealer has no such facilities, he is classified as a Truck-Jobber.)

Truck-Jobber: A dealer who buys primarily from wholesalers, carries a wide variety of items per truckload, and sells only to retailers at their door. (He may have storage facilities but does not sell on established premises. Usually a regular truck route is followed.)

Trucker: A dealer whose principal business is to buy produce in producing areas, transport it, and resell it either to retailers or other dealers. He handles only a few items per truckload. (He may operate a fleet of trucks. If a party does not buy the produce outright or take it on consignment, he is not considered a dealer but as a person hired to perform transportation services.)

Store Types

Large Store: A retail store with sales of fresh fruits and vegetables amounting to over $25,000 during 1948.

Small Store: A retail store with sales of fresh fruits and vegetables amounting to $25,000 or less during 1948.

Fruit and Vegetable Store: A retail store whose principal business is to sell produce. (It may be a fruit and vegetable stand or store, or a leased department in a supermarket. The classification is according to management and operation and not building.)

Grocery Store: Any other retail store handling fruits and vegetables.

Local Chain Store: A single store unit of a group of retail stores, local to the area, centrally owned, and with some degree of centralized control of operation. (Stores of national chain systems are excluded.)

Independent Store: A retail store which is controlled by its own individual ownership or management rather than from without. (This designation refers to retail stores which are not units of national or local chain store systems.)

Credit-Delivery Store: A retail store offering credit and/or delivery services to its customers in connection with the sale of goods.

Cash-Carry Store: A retail store offering neither credit nor delivery services to its customers.

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